

Remarks

The Advisory Action and Notice of Non-compliant Amendment mailed on December 22, 2010 have been reviewed carefully and the application amended in a sincere effort to place the application in condition for allowance. Accordingly, reconsideration of the claims, and allowance of the same, are respectfully requested on the basis of the following remarks.

Upon entry of this Amendment, Claims 1, 3-9, 11, 14-16, and 20-25 will be pending in the application. Claims 2, 10, 12-13, and 17-19 have been cancelled.

Support for the amendments made to Claim 22 can be found from paragraphs [0036] – [0051]. In those paragraphs it is clearly shown that the poly(dimethylsiloxane) surfactants are distinct from the fatty polyesters and the fatty acids used to form the internal mold release agent.

New Claim 23 is based on Claim 20 as submitted in the Response dated March 25, 2009. Support for this claim can be found in paragraph [0051] of Applicants published application as well as in the Examples. By way of illustration, Example 7 clearly shows that the reaction system does not contain a poly(dimethylsiloxane)-polyoxyethylene surfactant that contains polyoxypropylene. Rather, Surfactant C specifically states that it is a non-PO surfactant (see paragraph [0070]).

New Claim 24 recites that the internal mold release agent consists of components (i) and (ii). New Claim 25 recites the reaction system consist of the components recited therein. The Applicants submit that it is within their right to claim less than what was originally disclosed. Accordingly, it is submitted that they have the right to make the aforementioned amendments.

Because there is support for the amendments made to Claim 22 as well as new Claim 23, the Applicants submit that no issue of new matter is presented.

Rejection of Claims 20 and 21 under 35 U.S.C. 112

The Examiner has rejected Claims 20 and 21 under 35 U.S.C. 112. Specifically, the Examiner has rejected Claim 20 under 35 U.S.C. 112, first paragraph, for allegedly failing to comply with the written description requirement while also rejecting Claim 21 under 35 U.S.C. 112, second paragraph, for allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20:

Despite the Examiners' contention, the Applicants submit that it is within their right to claim that the reaction system is free of the specifically claimed surfactant. First, the Applicants submit that it is within their right to claim less than what is disclosed. As the Examiner has indicated, in paragraph [0051] the Applicants recite that the poly(dimethylsiloxane)-polyoxyethylene surfactant is preferably "essentially free" of oxyalkylene units derived from alkylene oxides other than ethylene oxide. Accordingly, as accepted under U.S. patent law, "essentially free" means not only that the aforementioned oxyalkylene units, such as those derived from a propylene oxide compound, may not be present in the surfactant, it also includes situation where such units may be present in the surfactant at low levels. Accordingly, by claiming that the surfactant is free of such oxyalkylene units, the Applicants are only claiming less than what they originally disclosed and such an amendment is proper.

Moreover, the Examples also support the contention that the reaction system is free of a surfactant that may comprises a surfactant wherein a part of the surfactants is derived from a propylene oxide compound. By way of illustration, Example 7 clearly shows that the reaction system does not contain a poly(dimethylsiloxane)-polyoxyethylene surfactant that contains polyoxypropylene. Rather, Surfactant C specifically states that it is a non-PO surfactant (see paragraph [0070].

In light of the forgoing, the Applicants submit that Claim 20 does in fact comply with 35 U.S.C. 112. Accordingly, the Applicants request that the rejection of this claim be withdrawn.¹

Claim 21:

As stated above, Claim 21 has been amended to further define that the poly(dimethylsiloxane) surfactants are distinct from the fatty polyesters and the fatty

¹ The Applicants would also like to address the Examiner's allegation that the Applicants did not address the 35 U.S.C. 112 rejection of Claim 20 in their response to the Final Office which was mailed on June 14, 2010 (see Advisory Action, continuation of note 11). In the Advisory Action, the Examiner alleges that the Applicants did not address the rejection of this claim as outlined in paragraph 1 of the Final Office Action. However, upon reviewing that Final Office Action, the Applicants respectfully submit that the Examiner failed to particularly mention why this Claim 20 failed to comply with 35 U.S.C. 112. Rather, under paragraphs 1 and 2 of the Final Office Action, the Examiner specifically refers to a number of other claims and explains why those claims did not comply with 35 U.S.C. 112 while remaining silent as to Claim 20. Accordingly, the Applicants submit that they were not in a position to address the aforementioned rejections as alleged by the Examiner since the Examiner did not provide any guidance as to why this claim did not comply with 35 U.S.C. 112.

acids used to form the internal mold release agent. Support for these amendments can be found from paragraphs [0036] – [0051] of the application as published.

With regard to the Examiner's contention that "Hawley's Condensed Chemical Dictionary" (hereinafter, Sax et al) is proof that the Applicants' claim is indefinite, the Applicants disagree. The Applicants are merely defining what is already described in the specification; specifically, that the surfactant used in the composition of the present invention is a poly(dimethylsiloxane) compound.

However, in order to facilitate prosecution of this case, the Applicants have further amended Claim 21 to recite that the surfactant is distinct from the fatty polyesters and fatty acids used to form the internal mold release agents.

In light of the forgoing, the Applicants request that the rejection of Claim 21 be withdrawn.

Rejection of Claims 1, 3-7, 9, 11, 13-16, and 18-21 under 35 U.S.C. 103(a)

The Examiner has rejected Claims 1, 3-7, 9, 11, 13-16, and 18-21 under 35 U.S.C. 103(a) for allegedly being unpatentable over U.S. Pat. No. 5,389,696 (hereinafter, "Dempsey") in view of U.S. Pat. No. 5,500,176 (hereinafter, "Parks") or U.S. Pat. Nos. 5,670,553 (hereinafter, "Mackey I") or 5,993,528 (hereinafter, "Mackey II") and further in view of U.S. Pat. Nos. 5,852,107 (hereinafter, "Gillis I") and 5,916,939 (hereinafter, "Gillis II").

In the responses dated September 23, 2010 and July 14, 2010 the Applicants have consistently argued that there is no motivation for one skilled in the art to modify the references as suggested by the Examiner (see pages 7-9 of the Response dated September 23, 2010 as well as pages 5-9 of the Response dated July 14, 2010). However, the Examiner has rejected the Applicants arguments and has continued to assert his position as summarized in paragraph 9 of the last Office Action:

Despite applicants' remarks, the skilled artisan would have reasonably expected release characteristics to some extent be based on quantity or concentration of siloxane surfactant utilized. One would expect that greater concentration of surfactant in the polymer would result in greater concentration of the surfactant in the polymer at the mold/polymer interface, thereby affecting mold release. All of applicants' argued examples are ineffective to establish that this argued relationship is unsupported or disproved,

because the argued examples neither establish nor disprove a nexus between mold release and amount of surfactant utilized. The examples vary other components (while mostly holding the content of surfactant constant); therefore, there is not way to establish the relationship between the number of releases and the quantity of surfactant used. In other words, there is nothing on the record to indicate that the number of releases is not based on some other variable. Definitive conclusions pertaining to the relationship between number of releases and quantity of surfactant would have to be derived from examples where all factors are held constant save for the quantity of surfactant.

As the Examiner is well aware, rejections based on 35 U.S.C. 103(a) must rest on a factual basis, not speculation, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. See *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. MPEP 2143.01. *KSR* (82 USPQ.2d at 1396) highlights the importance of determining "whether there was an apparent reason to combine the known elements in the fashion claimed by [Applicant]."

So, the point is not whether the skilled person could have arrived at the invention by modifying the prior art, but instead whether, in expectation of the advantages actually achieved, he or she would have done so because of promptings in the prior art.

As stated in the aforementioned responses made by the Applicant, there is simply no teaching and/or suggestion provided by the references that would lead one skilled in the art to make the modification as suggested by the Examiner. The Examiner asserts that "greater concentration of surfactant in the polymer would result in greater concentration of the surfactant in the polymer at the mold/polymer interface, thereby affecting mold release" (see quoted text above). The Examiner, therefore, speculates that one skilled in the art would have increased the amount of the L-6980 surfactant in the primary reference, Dempsey, thereby rendering the present application obvious (see paragraph 7, page 5, of the Final Office Action dated June 29, 2010).

However, Dempsey provides absolutely no guidance as to why one skilled in the art would make such the modification as proposed by the Examiner. As outlined in

Applicants' response dated July 14, 2010, Dempsey shows that mold release varies even while holding the level of L-6980 surfactant steady in 8 runs (see pages 6-7 of that response).

Additionally, in paragraph 6 of the Office Action, the Examiner concedes that Dempsey fails to disclose the fatty acid compound (see component (c)(ii) of Claim 1) that is claimed by the Applicants. However, the Examiner states that since both the fatty acid compound and the fatty polyester compound (see component (c)(i) of Claim 1) were known to be useful internal mold release agents for RIM AND SRIM polyurethane moldings. To prove his position, the Examiner's references Parks, Mackey I, and Mackey II.

While, Parks, Mackey I, and Mackey II may disclose the use of a fatty polyester compound and/or a fatty acid compound in the compositions disclosed therein, the Applicants submit that improper hindsight is being used to combine the references as proposed by the Examiner. Again, there is no teaching and/or suggestion within Dempsey to lead one skilled in the art to modify the references as proposed. The Applicants' specification is being used as a blueprint to reconstruct the invention from various pieces of art since there is simply no rationale as to why one skilled in the art would select only a particular portion or compound from the compositions disclosed in Parks, Mackey I, and Mackey II and modify Dempsey to include the compound.

With regard to Gillis I and II, the Examiner has conceded that these references do not disclose the surfactant and mold release agent that is claimed by the Applicants (see paragraph 8 of the Office Action). However, the Examiner does state that Gillis discloses the use of a polysiloxane surfactant with a mold release agent comprising a fatty acid component. The Applicants, again, respectfully submit that the combination of Gillis I and II with the aforementioned references is improper due to hindsight. There is no teaching and/or suggestion in Dempsey that would lead one skilled in the art to modify the references as proposed since there is simply no rationale as to why one skilled in the art would select only a particular portion or compound from the compositions disclosed in Gillis I and II and modify Dempsey, alone or in combination with the other references disclosed above, to include the compound.

Because Dempsey provides no guidance as to why one skilled in the art would make the various modifications as asserted by the Examiner, the Applicants respectfully submit that the Examiner has engaged in improper hindsight. The unusual connection between the surfactant having the claimed parameters and the improved release

properties was discovered by the present inventors and it was this discovery that renders the present application patentable over the cited references.

Moreover, while the Examiner has pointed to Applicants' Declaration of January 25, 2007 to prove that the EO mole content of Example 1 of Dempsey is as high as 0.0053 and, in the Examiner's mind, thereby proving that the 0.0053 value is so close to the end point of what is claimed that one skilled in the art would reasonably expect that the compositions would display similar properties, the Applicants' would like to draw the Examiner's attention to Example 6 of the present application. In that Example, a surfactant with an EO content of 0.0052 and no PO units was used and, as can be seen from the data, the mold release before failure was 129 as opposed to Example 7 (which used a surfactant with an EO content of 0.0058 and no PO units) where the number of releases before failure was > 294. In these Examples, no other variable (other than the composition of the surfactants) were varied. Therefore, the Examiner's speculation that Dempsey would have similar results is unfounded since it has already been shown that a surfactant having EO content of 0.0052 and no PO units did not perform as well as one that had an EO content of 0.0058 and no PO units even though all other variables were identical.

The Applicants, therefore, submit that the Examiner has engaged in improper hindsight and that one skilled in the art would not have modified Dempsey as asserted by the Examiner.

New Claims 23-25

With regard to new Claim 23, which depends from Claim 1, the Applicants submit that this claim is patentable for the reasons sated above.

With regard to new Claims 24 and 25, the Applicants submit that these claims are patentable over the cited references since the references, alone or in combination, do not disclose every feature that is recited in those claims.

Conclusion

In light of the foregoing arguments, it is respectfully submitted that Claims 1, 3-9, 11, 14-16, and 20-25 are in proper form for issuance of a Notice of Allowance and such action is respectfully requested at an early date.

Respectfully Submitted,



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